

*DEPARTMENT OF ENVIRONMENTAL QUALITY*

*WATER QUALITY STANDARDS*

**MONTANA SURFACE WATER QUALITY**  
**STANDARDS AND PROCEDURES**

**Administrative Rules of Montana 17.30.6**

**As of June 2000**

**Phone (406) 444-3080**

**UPDATED 8/31/00**

## Sub-Chapter 6

### Surface Water Quality Standards and Procedures

17.30.601 POLICY (1) The following standards are adopted to conserve water by protecting, maintaining, and improving the quality and potability of water for public water supplies, wildlife, fish and aquatic life, agriculture, industry, recreation, and other beneficial uses. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; TRANS, from DHES, 1996 MAR p. 1499.)

17.30.602 DEFINITIONS In this subchapter the following terms have the meanings indicated below and are supplemental to the definitions given in 75-5-103, MCA:

(1) "Acutely toxic conditions" means conditions lethal to aquatic organisms passing through the mixing zone. Lethality is a function of the magnitude of pollutant concentrations and the duration of organism exposure to those concentrations.

(2) "Bioconcentrating parameters" means the parameters listed in department Circular WQB-7 which have a bioconcentration factor greater than 300.

(3) "Carcinogenic parameters" means the parameters categorized as carcinogens in department Circular WQB-7.

(4) "Chronic toxicity" means that death or functional impairment occurs or can be expected to occur to organisms exposed for periods of time exceeding 96 hours.

(5) "Conduit" means any artificial or natural duct, either open or closed, capable of conveying liquids or pollutants.

(6) "Conventional water treatment" means in order of application the processes of coagulation, sedimentation, filtration and chlorination. If determined necessary by the department it also includes taste and odor control and lime softening.

(7) "Dewatered stream" means a perennial or intermittent stream from which water has been removed for one or more beneficial uses.

(8) "Discharge" means the injection, deposit, dumping, spilling, leaking, placing, or failing to remove any pollutant so that it or any constituent thereof may enter into state waters, including groundwater.

(9) "EPA" means the US environmental protection agency.

(10) "Ephemeral stream" means a stream or part of a stream which flows only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow and ice and whose channel bottom is always above the local water table.

(11) "Geometric mean" means the value obtained by taking the Nth root of the product of the measured values where zero values for measured values are taken to be the detection limit.

(12) "Harmful parameters" means parameters listed as harmful in department Circular WQB-7.

(13) "Intermittent stream" means a stream or reach of a stream that is below the local water table for at least some part of the year, and obtains its flow from both surface run-off and groundwater discharge.

(14) "Mixing zone" means the area of a water body contiguous to an effluent with characteristics qualitatively or quantitatively different from those of the receiving water. The mixing zone is a place where effluent and receiving water mix and not a place where effluents are treated. Certain water quality standards may not apply in the mixing zone for those parameters regulated by a MPDES or NPDES permit. An effluent, in its mixing zone, may not block passage of aquatic organisms nor may it cause acutely toxic conditions, except that ammonia, chlorine, and dissolved oxygen may be present at concentrations so as to cause potentially toxic conditions in no more than 10% of the mixing zone provided that there is no lethality to aquatic organisms passing through the mixing zone. The area in which these exceedences may be allowed shall be as small as practicable. Provisions for specific mixing zones will be determined on a case by case basis by application of the department's surface water mixing zone implementation guide.

(15) "MPDES" means the Montana pollutant discharge elimination system.

(16) "NPDES" means the national pollutant discharge elimination system.

(17) "Naturally occurring" means conditions or material present from runoff or percolation over which man has no control or from developed land where all reasonable land, soil and water conservation practices have been applied. Conditions resulting from the reasonable operation of dams in existence as of July 1, 1971 are natural.

(18) "Nonpoint source" means the source of pollutants which originates from diffuse runoff, seepage, drainage, or infiltration.

(19) "Pesticide" means insecticides, herbicides, rodenticides, fungicides or any substance or mixture of substances intended for preventing, destroying, controlling, repelling, altering life processes, or mitigating any insects, rodents, nematodes, fungi, weeds and other forms of plant or animal life.

(20) "Pollutants" means sewage, industrial wastes and other wastes as defined in 75-5-103(1)-(3), MCA.

(21) "Reasonable land, soil, and water conservation practices" means methods, measures, or practices that protect present and reasonably anticipated beneficial uses. These practices include but are not limited to structural and nonstructural controls and operation and maintenance procedures. Appropriate practices may be applied before, during, or after pollution-producing activities.

(22) "Sediment" means solid material settled from suspension in a liquid; mineral or organic solid material that is being transported or has been moved from its site of origin by air, water or ice and has come to rest on the earth's surface, either above or below sea level; or inorganic or organic particles originating from weathering, chemical precipitation or biological activity.

(23) "Settleable solids" means inorganic or organic particles that are being transported or have been transported by water from the site or sites of origin and are settled or are capable of being settled from suspension.

(24) "Sewer" means a pipe or conduit that carries wastewater or drainage water.

(25) "Surface waters" means any waters on the earth's surface, including but not limited to, streams, lakes, ponds, and reservoirs; and irrigation and drainage systems discharging directly into a stream, lake, pond, reservoir or other surface water. Water bodies used solely for treating, transporting or impounding pollutants shall not be considered surface water.

(26) "Storm sewer" or "storm drain" means a pipe or conduit that carries storm water and surface water and street washings.

(27) "Toxic parameters" means those parameters listed as toxins in department Circular WQB-7.

(28) "True color" means the color of water from which the turbidity has been removed.

(29) "Turbidity" means a condition in water or wastewater caused by the presence of suspended matter resulting in the scattering and absorption of light rays.

(30) The board hereby adopts and incorporates by reference department Circular WQB-7, entitled "Montana Numeric Water Quality Standards" (September 1999 edition), which establishes limits for toxic, carcinogenic, bioconcentrating, nutrient, and harmful parameters in water. Copies of Circular WQB-7 may be obtained from the Department of Environmental Quality, PO Box 200901, Helena, MT 59620-0901.

(31) The board hereby adopts and incorporates by reference ARM Title 17, chapter 30, subchapter 5, which contain criteria to be used to determine the mixing zones appropriate to different sets of conditions. A copy of ARM Title 17, chapter 30, subchapter 5 may be obtained from the Department of

Environmental Quality, PO Box 200901, Helena, MT 59620-0901 [phone: (406)444-2406]. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1988 MAR p. 1191, Eff. 6/10/88; AMD, 1988 MAR p. 2221, Eff. 10/14/88; AMD, 1992 MAR p. 2064, Eff. 9/11/92; AMD, 1994 MAR p. 2136, Eff. 8/12/94; AMD, 1995 MAR p. 1798, Eff. 9/15/95; AMD, 1996 MAR p. 555, Eff. 2/23/96; TRANS, from DHES, 1996 MAR p. 1499; AMD, 1999 MAR p. 94, Eff. 1/15/99; AMD, 1999 MAR p. 2257, Eff. 10/8/99; AMD, 1999 MAR p. 2275, Eff. 10/8/99.)

17.30.603 APPLICATION AND COMPOSITION OF SURFACE WATER QUALITY STANDARDS (1) The standards in this subchapter are adopted to establish maximum allowable changes in surface water quality and to establish a basis for limiting the discharge of pollutants which affect prescribed beneficial uses of surface waters.

(2) The surface water quality standards are composed of all rules of this subchapter.

(3) The provisions of ARM 17.30.635 through 17.30.637, 17.30.640, 17.30.641, 17.30.645 and 17.30.646 apply to all surface waters unless they conflict with ARM 17.30.620 through 17.30.629 in which case the requirements of ARM 17.30.620 through 17.30.629 prevail.

(4) The standards of this subchapter are applicable where these standards are or would be violated by discharges to groundwater. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1992 MAR p. 2064, Eff. 9/11/92; TRANS, from DHES, 1996 MAR p. 1499.)

Rules 17.30.604 and 17.30.605 reserved

17.30.606 STREAM CLASSIFICATION (1) Before streams are classified or standards established or modified, the board shall hold a public hearing.

(a) Notice of the hearing specifying the waters concerned and the classification, standards or modification of them shall be published at least once a week for 3 consecutive weeks in a daily newspaper of general circulation in the area affected.

(b) Notice shall also be mailed directly to persons the department believes may be affected by the proposed action.

(c) The water pollution control advisory council shall be given not less than 30 days prior to first publication to comment on the proposed action.

(d) The general rules of procedure found in ARM 17.4.101 relating to rulemaking will be followed. (History: 75-5-201,

MCA; IMP, 75-5-307, MCA; Eff. 12/31/72; TRANS, from DHES, 1996 MAR p. 1499.)

17.30.607 WATER-USE CLASSIFICATIONS--CLARK FORK-COLUMBIA RIVER DRAINAGE EXCEPT THE FLATHEAD AND KOOTENAI RIVER DRAINAGES  
The water-use classifications adopted for the Clark Fork of the Columbia River drainage are as follows:

- (1) Clark Fork River drainage except waters listed in (a)-(n) below . . . . .B-1
    - (a) Warm Springs drainage to Myers Dam near Anaconda . . . . .A-1
      - (i) Hearst Lake drainage to the Lower Hearst Inlet and Fifer Gulch drainage to the Anaconda city limits. (Anaconda municipal water supply) . . . . .A-Closed
      - (b) Silver Bow Creek (mainstem) from the confluence of Blacktail Deer Creek to Warm Springs Creek. . . . .I  
(The concentrator tailings pond and Silver Bow Creek drainage from this pond downstream to Blacktail Deer Creek and the tailings ponds at Warm Springs have no classification.)
      - (c) Yankee Doodle Creek drainage to and including the North Butte water supply reservoir . . . . .A-Closed
      - (d) Basin Creek drainage to and including the South Butte water supply reservoir . . . . .A-Closed
      - (e) Clark Fork River (mainstem) from Warm Springs Creek to Cottonwood Creek (near Deer Lodge) . . . . .C-2
      - (f) Clark Fork River (mainstem) from Cottonwood Creek to the Little Blackfoot River . . . . .C-1
      - (g) Tin Cup Joe Creek drainage to the Deer Lodge water supply intake . . . . .A-Closed
      - (h) Georgetown Lake and tributaries above Georgetown Dam (headwaters of Flint Creek drainage) . . . . .A-1
      - (i) Fred Burr Lake and headwaters from source to the outlet of the lake (Philipsburg water supply) . . . . .A-Closed
      - (j) South Boulder Creek drainage to the Philipsburg water supply intake . . . . .A-1
      - (k) Rattlesnake Creek drainage to the Missoula water supply intake . . . . .A-Closed
      - (l) Packer and Silver Creek drainage (tributaries to the St. Regis River) to the Saltese water supply intake . . . . .A-1
      - (m) Ashley Creek drainage to the Thompson Falls water supply intake . . . . .A-Closed
      - (n) Pilgrim Creek drainage to the Noxon water supply intake . . . . .A-1
- (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1988 MAR p. 1191, Eff. 6/10/88; AMD, 1994 MAR p. 3099, Eff. 12/9/94; TRANS, from DHES, 1996 MAR p.

1499.)

17.30.608 WATER-USE CLASSIFICATIONS--FLATHEAD RIVER DRAINAGE The water-use classifications adopted for the Flathead River are as follows:

- (1) Flathead River drainage above Flathead Lake except waters listed in (a)-(h) below . . . . . B-1
  - (a) Essex Creek drainage to the Essex water supply intake . . . . . A-Closed
  - (b) Stillwater River (mainstem) from Logan Creek to the Flathead River . . . . . B-2
  - (c) Whitefish Lake and its tributaries . . . . . A-1
  - (d) Whitefish River (mainstem) from the outlet of Whitefish Lake to the Stillwater River . . . . . B-2
  - (e) Haskill Creek drainage to the Whitefish water supply intake . . . . . A-1
  - (f) Ashley Creek (mainstem) from Smith Lake to bridge crossing on the airport road about 1 mile south of Kalispell B-2
  - (g) Ashley Creek (mainstem) from bridge crossing on airport road to the Flathead River . . . . . C-2
  - (h) North and middle forks of the Flathead River above their junction . . . . . A-1
- (2) Flathead Lake and its tributaries from Flathead River inlet to US Highway 93 bridge at Polson except Swan River and portions of Hellroaring Creek as listed in (a)-(c) below but including Swan Lake proper and Lake Mary Ronan proper. . . . A-1
  - (a) Swan River drainage (except Swan Lake proper) . . . B-1
  - (b) Hellroaring Creek drainage to the Polson water supply intake . . . . . A-Closed
  - (c) Remainder of Hellroaring Creek drainage . . . . . B-1
- (3) Flathead River drainage below the highway bridge at Polson to confluence with Clark Fork River except tributaries listed in (a)-(h) below . . . . . B-1
  - (a) Second Creek drainage to the Ronan water supply intake . . . . . A-Closed
  - (b) Crow Creek (mainstem) from road crossing in Section 16, T20N, R20W to the Flathead River . . . . . B-2
  - (c) Little Bitterroot River (mainstem) from Hubbart Reservoir dam to the Flathead River . . . . . B-2
  - (d) Hot Springs Creek drainage to the Hot Springs water supply intake . . . . . A-Closed
  - (e) Hot Springs Creek (mainstem) from the Hot Springs water supply intake to the Little Bitterroot River . . . . C-3
  - (f) Tributaries to Hot Springs Creek (if any) from the Hot Springs water supply intake to the Little Bitterroot River . . . . . B-1
  - (g) Mission Creek drainage to the St. Ignatius water

supply intake . . . . . A-1  
 (h) Mission Creek (mainstem) from US Highway No. 93  
 crossing to the Flathead River . . . . . B-2  
 (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff.  
 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p.  
 2252, Eff. 8/1/80; AMD, 1982 MAR p. 1745, Eff. 10/1/82; AMD,  
 1984 MAR p. 1802, Eff. 12/14/84; AMD, 1988 MAR p. 1191, Eff.  
 6/10/88; TRANS, from DHES, 1996 MAR p. 1499.)

17.30.609 WATER-USE CLASSIFICATIONS--KOOTENAI RIVER DRAINAGE The water-use classifications adopted for the Kootenai River are as follows:

(1) All waters except those listed in (a)-(d) below . B-1  
 (a) Deep Creek drainage (tributary to the Tobacco River) to the Fortine water supply intake . . . . . A-1  
 (b) Rainy Creek drainage to the W.R. Grace Company water supply intake . . . . . A-1  
 (c) Rainy Creek (mainstem) from the W.R. Grace Company water supply intake to the Kootenai River . . . . . C-1  
 (d) Flower Creek drainage to the Libby water supply intake . . . . . A-1  
 (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; TRANS, from DHES, 1996 MAR p. 1499.)

17.30.610 WATER-USE CLASSIFICATIONS--MISSOURI RIVER DRAINAGE EXCEPT YELLOWSTONE, BELLE FOURCHE, AND LITTLE MISSOURI RIVER DRAINAGES The water-use classifications adopted for the Missouri River are as follows:

(1) Missouri River drainage to and including the Sun River drainage except tributaries listed in (a) through (m) below . . . . . B-1  
 (a) East Gallatin River (mainstem) from Montana Highway No. 293 crossing about one-half mile north of Bozeman to Dry Creek about 5 miles east of Manhattan . . . . . B-2  
 (b) Lyman and Sourdough (Bozeman) Creek drainages to the Bozeman water supply intakes . . . . . A-Closed  
 (c) Hyalite Creek drainage to the Bozeman water supply intake . . . . . A-1  
 (d) Big Hole River drainage to Butte Water Company intake above Divide . . . . . A-1  
 (e) Rattlesnake Creek drainage to the Dillon water supply intake . . . . . A-1  
 (f) Indian Creek drainage to the Sheridan water supply intake . . . . . A-1  
 (g) Basin Creek drainage to the Basin water supply intake . . . . . A-1



- (h) McClellan Creek drainage to the East Helena water supply intake . . . . . A-1
- (i) Prickly Pear Creek (mainstem) from the Montana Highway No. 433 crossing about 1 mile northwest of East Helena to Lake Helena . . . . . I
- (j) Ten Mile Creek drainage to the Helena water supply intake . . . . . A-1
- (k) Willow Creek drainage to the White Sulphur Springs water supply intake . . . . . A-Closed
- (l) Muddy Creek mainstem (tributary of Sun River) . . . . . I
- (m) Sun River (mainstem) from Muddy Creek to the Missouri River . . . . . B-3
- (2) Missouri River drainage from Sun River to Rainbow Dam . . . . . B-2
- (3) Missouri River drainage from Rainbow Dam in Great Falls to the Marias River except waters listed in (a) through (d) below . . . . . B-3
- (a) Belt Creek drainage to and including Otter Creek drainage except portion of O'Brien Creek listed in (i) below . . . . . B-1
- (i) O'Brien Creek drainage to the Neihart water supply intake . . . . . A-1
- (b) Belt Creek (mainstem) from Otter Creek to the Missouri River . . . . . B-2
- (c) Tributaries to Belt Creek from Otter Creek to the Missouri River . . . . . B-1
- (d) Highwood and Shonkin Creek drainages . . . . . B-1
- (4) Marias River drainage except the tributaries and segments listed in (a) through (f) below . . . . . B-2
- (a) Cutbank Creek drainage except waters listed in (i) and (ii) below . . . . . B-1
- (i) Willow Creek (mainstem) from the Montana Highway No. 464 crossing about one-half mile north of Browning to Cutbank Creek . . . . . B-2
- (ii) Cutbank Creek (mainstem) from Old Maid Miller Coulee near Cut Bank to Birch Creek . . . . . B-2
- (b) Two Medicine Creek drainage except for the waters listed in (i) through (iii) below . . . . . B-1
- (i) Midvale Creek drainage to the East Glacier water supply intake . . . . . A-Closed
- (ii) Summit Creek drainage to the Summit water supply intake . . . . . A-Closed
- (iii) Two Medicine Creek (mainstem) from Badger Creek to Birch Creek . . . . . B-2
- (c) Dry Fork Marias River (mainstem) from Interstate 15 crossing near Conrad to Marias River . . . . . B-3
- (d) Teton River drainage to and including Deep Creek

near Choteau . . . . .	B-1
(e) Marias River mainstem from Tiber Dam to the county road crossing in section 17, T29N, R5E . . . . .	B-1
(f) Teton River below Highway (Interstate) 15 . . . . .	B-3
(5) Missouri River drainage from Marias River to Fort Peck Dam except waters listed in (a) through (f) below . . . .	C-3
(a) Missouri River (mainstem) from Marias River to Fort Peck Dam . . . . .	B-3
(b) Eagle Creek drainage to but excluding Dog Creek . . . .	B-1
(c) Judith River drainage except waters listed in (i) through (iv) below . . . . .	B-1
(i) Judith River (mainstem) from Big Spring Creek to the Missouri River . . . . .	B-2
(ii) Sage Creek drainage below US Highway 87 . . . . .	C-3
(iii) Wolf Creek drainage below US Highway 87 . . . . .	C-3
(iv) Tributaries to Judith River from Big Spring Creek to the Missouri River . . . . .	C-3
(d) Cow Creek drainage to but excluding Al's Creek . . . .	B-1
(e) Musselshell River drainage to Deadman's Basin diversion canal above Shawmut except for the water listed in (i) below . . . . .	B-1
(i) Musselshell River (mainstem) from Hopley Creek to Deadman's Basin Diversion Canal near Shawmut . . . . .	B-2
(f) Musselshell River drainage below Deadman's Basin diversion canal above Shawmut except for the waters listed in (i) through (iv) below . . . . .	C-3
(i) Deadman's Basin Reservoir . . . . .	B-1
(ii) Careless and Swimming Woman Creek drainage above their confluence north of Ryegate . . . . .	B-1
(iii) Flatwillow Creek drainage above US Highway 87 crossing south of Grassrange . . . . .	B-2
(iv) South Willow Creek drainage above county road bridge in T10N, R24E, section 7 . . . . .	B-1
(6) Missouri River drainage from Fort Peck Dam to the Milk River . . . . .	B-2
(7) Milk River drainage from source (or from the Glacier National Park Boundary) to the International Boundary . . . .	B-1
(8) Milk River drainage from the International Boundary to the Missouri River except the tributaries listed in (a) through (d) below . . . . .	B-3
(a) Sage Creek drainage to the section line between sections 1 and 12 T36N R5W . . . . .	B-1
(b) Big Sandy Creek drainage to Town of Big Sandy infiltration wells . . . . .	B-1
(c) Beaver, Little Box Elder and Clear Creek drainage (near Havre) . . . . .	B-1
(d) Peoples Creek drainage to and including the South	

Fork of Peoples Creek drainage . . . . . B-1  
 (9) Missouri River drainage from Milk River to North  
 Dakota boundary except waters listed in (a) through (d)  
 below . . . . . C-3  
 (a) Missouri River (mainstem) from Milk River to  
 North Dakota boundary . . . . . B-3  
 (b) Wolf Creek drainage near Wolf Point . . . . . B-2  
 (c) Antelope Creek drainage near Antelope . . . . . B-3  
 (d) Poplar River drainage . . . . . B-2  
 (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff.  
 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p.  
 2252, Eff. 8/1/80; AMD, 1982 MAR p. 1745, Eff. 10/1/82; AMD,  
 1984 MAR p. 1802, Eff. 12/14/84; AMD, 1988 MAR p. 1191, Eff.  
 6/10/88; TRANS, from DHES, 1996 MAR p. 1499; AMD, 1998 MAR p.  
 2489, Eff. 9/11/98.)

17.30.611 WATER-USE CLASSIFICATION--YELLOWSTONE RIVER  
DRAINAGE The water-use classifications adopted for the  
 Yellowstone River are as follows:

(1) Yellowstone River drainage to the Laurel water  
 supply intake . . . . . B-1  
 (2) Yellowstone River drainage from the Laurel water  
 supply intake to the Billings water supply intake except  
 the tributaries listed in (a)-(c) below . . . . . B-2  
 (a) Clarks Fork Yellowstone River drainage from source  
 to the Wyoming state line and from the Wyoming state line to  
 and including Jack Creek near Bridger . . . . . B-1  
 (b) Mainstem of the Clarks Fork River from Jack Creek  
 to the Yellowstone River . . . . . B-2  
 (c) Tributaries to the Clarks Fork Yellowstone River  
 from Jack Creek to the Yellowstone River except the portion  
 of West Fork of Rock Creek listed in (i) below . . . . . B-1  
 (i) West Fork of Rock Creek drainage to the Red Lodge  
 water supply intake . . . . . A-1  
 (3) Yellowstone River drainage from the Billings water  
 supply intake to the North Dakota state line and including  
 the Big Horn River drainage except the waters listed in  
 (a)-(f) below . . . . . C-3  
 (a) Yellowstone River mainstem . . . . . B-3  
 (b) Pryor Creek drainage to Interstate 90 . . . . . B-1  
 (c) Big Horn drainage above but excluding Williams  
 Coulee near Hardin . . . . . B-1  
 (d) Little Big Horn drainage above and including  
 Lodgegrass Creek drainage near Lodge Grass . . . . . B-1  
 (e) Remainder of the Little Big Horn drainage . . . . . B-2  
 (f) Big Horn River mainstem from Williams Coulee to  
 Yellowstone River . . . . . B-2

- (4) Yellowstone River drainage from Big Horn River to North Dakota boundary except waters listed in (a)-(d) below. C-3
- (a) Yellowstone River mainstem from Big Horn River to North Dakota boundary . . . . . B-3
- (b) Tongue River (mainstem) from Wyoming boundary to Prairie Dog Coulee . . . . . B-2
- (c) Tongue River mainstem from Prairie Dog Coulee to Yellowstone River . . . . . B-3
- (d) Fox Creek drainage near Sidney . . . . . B-2
- (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1988 MAR p. 1191, Eff. 6/10/88; TRANS, from DHES, 1996 MAR p. 1499.)

17.30.612 WATER-USE CLASSIFICATIONS--LITTLE MISSOURI RIVER DRAINAGE--BELLE FOURCHE DRAINAGE (1) The water-use classifications adopted for all waters in the Little Missouri and Belle Fourche drainages are . . . . . C-3

(History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; TRANS, from DHES, 1996 MAR p. 1499.)

17.30.613 WATER-USE CLASSIFICATIONS--HUDSON BAY DRAINAGE The water-use classifications for the Hudson Bay drainage are:

- (1) All waters outside Glacier National Park . . . . . B-1
- (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; TRANS, from DHES, 1996 MAR p. 1499.)

17.30.614 WATER-USE CLASSIFICATIONS--NATIONAL PARK, WILDERNESS AND PRIMITIVE AREA WATERS The water-use classifications for all national park, wilderness and primitive area waters are as follows:

- (1) All waters even if classifications listed in ARM 17.30.607 through 17.30.613 imply or state otherwise . . . . . A-1
- (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; TRANS, from DHES, 1996 MAR p. 1499.)

Rules 17.30.615 through 17.30.619 reserved

17.30.620 SPECIFIC SURFACE WATER QUALITY STANDARDS--GENERAL (1) Specific surface water quality standards, along with general provisions in ARM 17.30.635 through 17.30.637, 17.30.640, 17.30.641, 17.30.645 and 17.30.646, protect the beneficial water uses set forth in the water-use descriptions

for the following classifications of water.

(2) Standards for organisms of the coliform group are based on a minimum of 5 samples obtained during separate 24-hour periods during any consecutive 30-day period analyzed by the most probable number or equivalent membrane filter methods.

(History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; TRANS, from DHES, 1996 MAR p. 1499.)

17.30.621 A-CLOSED CLASSIFICATION STANDARDS (1) Waters classified A-Closed are suitable for drinking, culinary, and food processing purposes after simple disinfection. Water quality is suitable for swimming, recreation, growth, and propagation of fishes and associated aquatic life, although access restrictions to protect public health may limit actual use of A-Closed waters for these uses.

(2) Public access and activities such as livestock grazing and timber harvest are to be controlled by the utility owner under conditions prescribed and orders issued by the department.

(3) No person may violate the following specific water quality standards for waters classified A-Closed:

(a) The geometric mean number of organisms in the coliform group must not exceed 50 per 100 milliliters.

(b) No change from naturally occurring dissolved oxygen levels is allowed.

(c) No change from natural pH is allowed.

(d) No increase above naturally occurring turbidity is allowed.

(e) No increase above naturally occurring water temperature is allowed.

(f) No increases are allowed above naturally occurring concentrations of sediment, settleable solids, oils, or floating solids, which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

(g) No increase in true color is allowed.

(h) No increases of carcinogenic, bioconcentrating, toxic or harmful parameters, pesticides and organic and inorganic materials, including heavy metals, above naturally occurring concentrations, are allowed.

(i) No increase in radioactivity above natural background levels is allowed. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1988 MAR p. 1191, Eff. 6/10/88; AMD, 1994 MAR p. 2136, Eff. 8/12/94; TRANS, from DHES, and AMD, 1996 MAR p. 1499, Eff. 6/7/96.)

17.30.622 A-1 CLASSIFICATION STANDARDS (1) Waters classified A-1 are suitable for drinking, culinary and food processing purposes after conventional treatment for removal of naturally present impurities.

(2) Water quality must be suitable for bathing, swimming and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply.

(3) No person may violate the following specific water quality standards for waters classified A-1:

(a) The geometric mean number of organisms in the coliform group must not exceed 50 per 100 milliliters if resulting from domestic sewage.

(b) Dissolved oxygen concentration must not be reduced below the applicable standards given in department Circular WQB-7.

(c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 8.5 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.

(d) No increase above naturally occurring turbidity is allowed except as permitted in ARM 17.30.637.

(e) A 1°F maximum increase above naturally occurring water temperature is allowed within the range of 32°F to 66°F; within the naturally occurring range of 66°F to 66.5°F, no discharge is allowed which will cause the water temperature to exceed 67°F; and where the naturally occurring water temperature is 66.5°F or greater, the maximum allowable increase in water temperature is 0.5°F. A 2°F-per-hour maximum decrease below naturally occurring water temperature is allowed when the water temperature is above 55°F, and a 2°F maximum decrease below naturally occurring water temperature is allowed within the range of 55°F to 32°F.

(f) No increases are allowed above naturally occurring concentrations of sediment, settleable solids, oils, or floating solids, which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

(g) True color must not be increased more than 2 units above naturally occurring color.

(h)(i) Concentrations of carcinogenic, bioconcentrating, toxic, or harmful parameters which would remain in the water after conventional water treatment may not exceed the applicable standards set forth in department Circular WQB-7.

(ii) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 12, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards contained in department Circular WQB-7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).

(iii) If site-specific criteria are developed using the procedures given in the Water Quality Standards Handbook (US EPA, Dec. 1983), and provided that other routes of exposure to toxic parameters by aquatic life are addressed, the criteria so developed shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards in department Circular WQB-7.

(iv) In accordance with 75-5-306(1), MCA, it is not necessary that wastes be treated to a purer condition than the natural condition of the receiving water as long as the minimum treatment requirements, adopted pursuant to 75-5-305, MCA, are met.

(4) The board hereby adopts and incorporates by reference the following:

(a) department Circular WQB-7, entitled "Montana Numeric Water Quality Standards" (September 1999 edition), which establishes limits for toxic, carcinogenic, bioconcentrating, nutrient, and harmful parameters in water; and

(b) the Water Quality Standards Handbook (US EPA, Dec. 1983) which sets forth procedures for development of site-specific criteria.

(c) Copies of these materials may be obtained from the Department of Environmental Quality, PO Box 200901, Helena, MT 59620-0901. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1984 MAR p. 1802, Eff. 12/14/84; AMD, 1988 MAR p. 1191, Eff. 6/10/88; AMD, 1994 MAR p. 2136, Eff. 8/12/94; AMD, 1995 MAR p. 1798, Eff. 9/15/95; AMD, 1996 MAR p. 555, Eff. 2/23/96; TRANS, from DHES, and AMD, 1996 MAR p. 1499, Eff. 6/7/96; AMD, 1999 MAR p. 94, Eff. 1/15/99; AMD, 1999 MAR p. 2257, Eff. 10/8/99; AMD, 1999 MAR p. 2275, Eff. 10/8/99.)

17.30.623 B-1 CLASSIFICATION STANDARDS (1) Waters classified B-1 are suitable for drinking, culinary and food processing purposes, after conventional treatment; bathing, swimming and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply.

(2) No person may violate the following specific water

quality standards for waters classified B-1:

(a) During periods when the daily maximum water temperature is greater than 60 F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, nor are 10% of the total samples during any 30-day period to exceed 400 fecal coliforms per 100 milliliters.

(b) Dissolved oxygen concentration must not be reduced below the levels given in department Circular WQB-7.

(c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 8.5 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.

(d) The maximum allowable increase above naturally occurring turbidity is 5 nephelometric turbidity units except as permitted in ARM 17.30.637.

(e) A 1°F maximum increase above naturally occurring water temperature is allowed within the range of 32°F to 66°F; within the naturally occurring range of 66°F to 66.5°F, no discharge is allowed which will cause the water temperature to exceed 67°F; and where the naturally occurring water temperature is 66.5°F or greater, the maximum allowable increase in water temperature is 0.5°F. A 2°F per-hour maximum decrease below naturally occurring water temperature is allowed when the water temperature is above 55°F, and a 2°F maximum decrease below naturally occurring water temperature is allowed within the range of 55°F to 32°F. This applies to all waters in the state classified B-1 except for Prickly Pear Creek from McClellan Creek to the Montana Highway No. 433 crossing where a 2°F maximum increase above naturally occurring water temperature is allowed within the range of 32°F to 65°F; within the naturally occurring range of 65°F to 66.5°F, no discharge is allowed which will cause the water temperature to exceed 67°F; and where the naturally occurring water temperature is 66.5°F or greater, the maximum allowable increase in water temperature is 0.5°F.

(f) No increases are allowed above naturally occurring concentrations of sediment, settleable solids, oils, or floating solids, which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

(g) True color must not be increased more than 5 units above naturally occurring color.



(h)(i) Concentrations of carcinogenic, bioconcentrating, toxic or harmful parameters which would remain in the water after conventional water treatment may not exceed the applicable standards set forth in department Circular WQB-7.

(ii) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 12, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in department Circular WQB-7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).

(iii) If site-specific criteria are developed using the procedures given in the Water Quality Standards Handbook (US EPA, Dec. 1983), and provided that other routes of exposure to toxic parameters by aquatic life are addressed, the criteria so developed shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards in department Circular WQB-7.

(iv) In accordance with 75-5-306(1), MCA, it is not necessary that wastes be treated to a purer condition than the natural condition of the receiving water as long as the minimum treatment requirements, adopted pursuant to 75-5-305, MCA, are met.

(3) The board hereby adopts and incorporates by reference the following:

(a) department Circular WQB-7, entitled "Montana Numeric Water Quality Standards" (September 1999 edition), which establishes standards for toxic, carcinogenic, bioconcentrating, nutrient, and harmful parameters in water; and

(b) the Water Quality Standards Handbook (US EPA, Dec. 1983) which sets forth procedures for development of site-specific criteria.

(c) Copies of these materials may be obtained from the Department of Environmental Quality, PO Box 200901, Helena, MT 59620-0901. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1982 MAR p. 1746, Eff. 10/1/82; AMD, 1984 MAR p. 1802, Eff. 12/14/84; AMD, 1988 MAR p. 1191, Eff. 6/10/88; AMD, 1994 MAR p. 2136, Eff. 8/12/94; AMD, 1995 MAR p. 1798, Eff. 9/15/95; AMD, 1996 MAR p. 555, Eff. 2/23/96; TRANS, from DHES, and AMD, 1996 MAR p. 1499, Eff. 6/7/96; AMD, 1999 MAR p. 94, Eff. 1/15/99; AMD, 1999 MAR p. 2257, Eff. 10/8/99; AMD, 1999 MAR p. 2275, Eff. 10/8/99.)

17.30.624 B-2 CLASSIFICATION STANDARDS (1) Waters classified B-2 are suitable for drinking, culinary and food processing purposes, after conventional treatment; bathing, swimming and recreation; growth and marginal propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply.

(2) No person may violate the following specific water quality standards for waters classified B-2:

(a) During periods when the daily maximum water temperature is greater than 60 F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, nor are 10% of the total samples during any 30-day period to exceed 400 fecal coliforms per 100 milliliters.

(b) Dissolved oxygen concentration must not be reduced below the applicable standards given in department Circular WQB-7.

(c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 9.0 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.

(d) The maximum allowable increase above naturally occurring turbidity is 10 nephelometric turbidity units except as permitted in ARM 17.30.637.

(e) A 1°F maximum increase above naturally occurring water temperature is allowed within the range of 32°F to 66°F; within the naturally occurring range of 66°F to 66.5°F, no discharge is allowed which will cause the water temperature to exceed 67°F; and where the naturally occurring water temperature is 66.5°F or greater, the maximum allowable increase in water temperature is 0.5°F. A 2°F per-hour maximum decrease below naturally occurring water temperature is allowed when the water temperature is above 55°F, and a 2°F maximum decrease below naturally occurring water temperature is allowed within the range of 55°F to 32°F.

(f) No increases are allowed above naturally occurring concentrations of sediment, settleable solids, oils, or floating solids which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

(g) True color must not be increased more than 5 units above naturally occurring color.

(h)(i) Concentrations of carcinogenic, bioconcentrating, toxic or harmful parameters which would remain in the water after conventional water treatment may not exceed the applicable standards set forth in department Circular WQB-7.

(ii) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 12, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in department Circular WQB-7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).

(iii) If site-specific criteria are developed using the procedures given in the Water Quality Standards Handbook (US EPA, Dec. 1983), and provided that other routes of exposure to toxic parameters by aquatic life are addressed, the criteria so developed shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards in department Circular WQB-7.

(iv) In accordance with 75-5-306(1), MCA, it is not necessary that wastes be treated to a purer condition than the natural condition of the receiving water as long as the minimum treatment requirements, adopted pursuant to 75-5-305, MCA, are met.

(3) The board hereby adopts and incorporates by reference the following:

(a) department Circular WQB-7, entitled "Montana Numeric Water Quality Standards" (September 1999 edition), which establishes standards for toxic, carcinogenic, bioconcentrating, nutrient, and harmful parameters in water; and

(b) the Water Quality Standards Handbook (US EPA, Dec. 1983) which sets forth procedures for development of site-specific criteria.

(c) Copies of these materials may be obtained from the Department of Environmental Quality, PO Box 200901, Helena, MT 59620-0901. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1982 MAR p. 1746, Eff. 10/1/82; AMD, 1984 MAR p. 1802, Eff. 12/14/84; AMD, 1988 MAR p. 1191, Eff. 6/10/88; AMD, 1994 MAR p. 2136, Eff. 8/12/94; AMD, 1995 MAR p. 1798, Eff. 9/15/95; AMD, 1996 MAR p. 555, Eff. 2/23/96; TRANS, from DHES, and AMD, 1996 MAR p. 1499, Eff. 6/7/96; AMD, 1999 MAR p. 94, Eff. 1/15/99; AMD, 1999 MAR p. 2257, Eff. 10/8/99; AMD, 1999 MAR p. 2275, Eff. 10/8/99.)

17.30.625 B-3 CLASSIFICATION STANDARDS (1) Waters classified B-3 are suitable for drinking, culinary and food processing purposes, after conventional treatment; bathing, swimming and recreation; growth and propagation of non-salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply.

(2) No person may violate the following specific water quality standards for waters classified B-3:

(a) During periods when the daily maximum water temperature is greater than 60°F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, nor are 10% of the total samples during any 30-day period to exceed 400 fecal coliforms per 100 milliliters.

(b) Dissolved oxygen concentration must not be reduced below the applicable standards specified in department Circular WQB-7.

(c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 9.0 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.

(d) The maximum allowable increase above naturally occurring turbidity is 10 nephelometric turbidity units except as permitted in ARM 17.30.637.

(e) A 3°F maximum increase above naturally occurring water temperature is allowed within the range of 32°F to 77°F; within the naturally occurring range of 77°F to 79.5°F, no thermal discharge is allowed which will cause the water temperature to exceed 80°F; and where the naturally occurring water temperature is 79.5°F or greater, the maximum allowable increase in water temperature is 0.5°F. A 2°F per-hour maximum decrease below naturally occurring water temperature is allowed when the water temperature is above 55°F, and a 2°F maximum decrease below naturally occurring water temperature is allowed within the range of 55°F to 32°F.

(i) These allowable increases apply to all waters in the state classified B-3, except for the mainstem of the Yellowstone River from the Billings water supply intake to the water diversion at Intake, where a 3°F maximum increase above naturally occurring water temperature is allowed within the range of 32°F to 79°F; within the range of 79°F to 81.5°F, no thermal discharge is allowed which will cause the water temperature to exceed 82°F; and where the naturally occurring water temperature is 81.5°F or greater, the maximum allowable increase in water temperature is 0.5°F.

(ii) From the water diversion at Intake to the North Dakota state line, a 3°F maximum increase above naturally occurring water temperature is allowed within the range of 32°F to 82°F; within the range of 82°F to 84.5°F, no thermal discharge is allowed which will cause the water temperature to exceed 85°F; and where the naturally occurring water temperature is 84.5°F or greater, the maximum allowable increase in water temperature is 0.5°F.

(f) No increases are allowed above naturally occurring concentrations of sediment, settleable solids, oils, or floating

solids which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

(g) True color must not be increased more than 5 units above naturally occurring color.

(h)(i) Concentrations of carcinogenic, bioconcentrating, toxic, or harmful parameters which would remain in the water after conventional water treatment may not exceed the applicable standards set forth in department Circular WQB-7.

(ii) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 12, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in department Circular WQB-7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).

(iii) If site-specific criteria are developed using the procedures given in the Water Quality Standards Handbook (US EPA, Dec. 1983), and provided that other routes of exposure to toxic parameters by aquatic life are addressed, the criteria so developed shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards specified in department Circular WQB-7.

(iv) In accordance with 75-5-306(1), MCA, it is not necessary that wastes be treated to a purer condition than the natural condition of the receiving water as long as the minimum treatment requirements, adopted pursuant to 75-5-305, MCA, are met.

(3) The board hereby adopts and incorporates by reference the following:

(a) department Circular WQB-7, entitled "Montana Numeric Water Quality Standards" (September 1999 edition), which establishes standards for toxic, carcinogenic, bioconcentrating, nutrient, and harmful parameters in water; and

(b) the Water Quality Standards Handbook (US EPA, Dec. 1983) which sets forth procedures for development of site-specific criteria.

(c) Copies of these materials may be obtained from the Department of Environmental Quality, PO Box 200901, Helena, MT 59620-0901. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1982 MAR p. 1746, Eff. 10/1/82; AMD, 1984 MAR p. 1802, Eff. 12/14/84; AMD, 1988 MAR p. 1191, Eff. 6/10/88; AMD, 1994 MAR p. 2136, Eff. 8/12/94; AMD, 1995 MAR p. 1798, Eff. 9/15/95; AMD, 1996 MAR p. 555, Eff. 2/23/96; TRANS, from DHES, and AMD, 1996 MAR p. 1499, Eff. 6/7/96; AMD, 1999 MAR p. 94, Eff. 1/15/99; AMD, 1999 MAR p.

2257, Eff. 10/8/99; AMD, 1999 MAR p. 2275, Eff. 10/8/99.)

17.30.626 C-1 CLASSIFICATION STANDARDS (1) Waters classified C-1 are suitable for bathing, swimming and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply.

(2) No person may violate the following specific water quality standards for waters classified C-1:

(a) During periods when the daily maximum water temperature is greater than 60°F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, nor are 10% of the total samples during any 30-day period to exceed 400 fecal coliforms per 100 milliliters.

(b) Dissolved oxygen concentration must not be reduced below the applicable standards given in department Circular QWB-7.

(c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 8.5 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.

(d) The maximum allowable increase above naturally occurring turbidity is 5 nephelometric turbidity units except as permitted in ARM 17.30.637.

(e) A 1°F maximum increase above naturally occurring water temperature is allowed within the range of 32°F to 66°F; within the naturally occurring range of 66°F to 66.5°F, no discharge is allowed which will cause the water temperature to exceed 67°F; and where the naturally occurring water temperature is 66.5°F or greater, the maximum allowable increase in water temperature is 0.5°F. A 2°F per-hour maximum decrease below naturally occurring water temperature is allowed when the water temperature is above 55°F, and a 2°F maximum decrease below naturally occurring water temperature is allowed within the range of 55°F to 32°F.

(f) No increases are allowed above naturally occurring concentrations of sediment, settleable solids, oils, or floating solids, which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

(g) True color must not be increased more than 5 units above naturally occurring color.

(h) (i) Concentrations of carcinogenic, bioconcentrating, toxic, or harmful parameters may not exceed levels which render the waters harmful, detrimental or injurious to public health. Concentrations of toxic parameters also may not exceed the

applicable standards specified in department Circular WQB-7.

(ii) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 12, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in department Circular WQB-7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).

(iii) If site-specific criteria are developed using the procedures given in the Water Quality Standards Handbook (US EPA, Dec. 1983), and provided that other routes of exposure to toxic parameters by aquatic life are addressed, the criteria so developed shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards in department Circular WQB-7.

(iv) In accordance with 75-5-306(1), MCA, it is not necessary that wastes be treated to a purer condition than the natural condition of the receiving water as long as the minimum treatment requirements, adopted pursuant to 75-5-305, MCA, are met.

(3) The board hereby adopts and incorporates by reference the following:

(a) department Circular WQB-7, entitled "Montana Numeric Water Quality Standards" (September 1999 edition), which establishes standards for toxic, carcinogenic, bioconcentrating, nutrient, and harmful parameters in water; and

(b) the Water Quality Standards Handbook (US EPA, Dec. 1983) which sets forth procedures for development of site-specific criteria.

(c) Copies of these materials may be obtained from the Department of Environmental Quality, PO Box 200901, Helena, MT 59620-0901. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1982 MAR p. 1746, Eff. 10/1/82; AMD, 1984 MAR p. 1802, Eff. 12/14/84; AMD, 1988 MAR p. 1191, Eff. 6/10/88; AMD, 1994 MAR p. 2136, Eff. 8/12/94; AMD, 1995 MAR p. 1798, Eff. 9/15/95; AMD, 1996 MAR p. 555, Eff. 2/23/96; TRANS, from DHES, and AMD, 1996 MAR p. 1499, Eff. 6/7/96; AMD, 1999 MAR p. 94, Eff. 1/15/99; AMD, 1999 MAR p. 2257, Eff. 10/8/99; AMD, 1999 MAR p. 2275, Eff. 10/8/99.)

17.30.627 C-2 CLASSIFICATION STANDARDS (1) Waters classified C-2 are suitable for bathing, swimming and recreation; growth and marginal propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply.

(2) No person may violate the following specific water

quality standards for waters classified C-2:

(a) During periods when the daily maximum water temperature is greater than 60 F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, nor are 10% of the total samples during any 30-day period to exceed 400 fecal coliforms per 100 milliliters.

(b) Dissolved oxygen concentration may not be reduced below 7.0 milligrams per liter from October 1 through June 1 nor below 6.0 milligrams per liter from June 2 through September 30. These levels apply to all waters in the state classified C-2 except for Ashley Creek below the bridge crossing on airport road where the dissolved oxygen concentrations may not be reduced below 5 mg/l from October 1 through June 1, nor below 3 mg/l from June 2 through September 30.

(c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 9.0 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.

(d) The maximum allowable increase above naturally occurring turbidity is 10 nephelometric turbidity units except as permitted in ARM 17.30.637.

(e) A 1°F maximum increase above naturally occurring water temperature is allowed within the range of 32°F to 66°F; within the naturally occurring range of 66°F to 66.5°F, no discharge is allowed which will cause the water temperature to exceed 67°F; and where the naturally occurring water temperature is 66.5°F or greater, the maximum allowable increase in water temperature is 0.5°F. A 2°F per-hour maximum decrease below naturally occurring water temperature is allowed when the water temperature is above 55°F, and a 2°F maximum decrease below naturally occurring water temperature is allowed within the range of 55°F to 32°F.

(f) No increases are allowed above naturally occurring concentrations of sediment, settleable solids, oils, or floating solids which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

(g) True color must not be increased more than 5 units above naturally occurring color.

(h)(i) Concentrations of carcinogenic, bioconcentrating, toxic, or harmful parameters may not exceed levels which render the waters harmful, detrimental or injurious to public health. Concentrations of toxic parameters also may not exceed the applicable standards specified in department Circular WQB-7.

(ii) Dischargers issued permits under ARM Title 17,



chapter 30, subchapter 12, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in department Circular WQB-7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).

(iii) If site-specific criteria are developed using the procedures given in the Water Quality Standards Handbook (US EPA, Dec. 1983), and provided that other routes of exposure to toxic parameters by aquatic life are addressed, the criteria so developed shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards in department Circular WQB-7.

(iv) In accordance with 75-5-306(1), MCA, it is not necessary that wastes be treated to a purer condition than the natural condition of the receiving water as long as the minimum treatment requirements, adopted pursuant to 75-5-305, MCA, are met.

(3) The board hereby adopts and incorporates by reference the following:

(a) department Circular WQB-7, entitled "Montana Numeric Water Quality Standards" (September 1999 edition), which establishes standards for toxic, carcinogenic, bioconcentrating, nutrient, and harmful parameters in water; and

(b) the Water Quality Standards Handbook (US EPA, Dec. 1983) which sets forth procedures for development of site-specific criteria.

(c) Copies of these materials may be obtained from the Department of Environmental Quality, PO Box 200901, Helena, MT 59620-0901. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1982 MAR p. 1746, Eff. 10/1/82; AMD, 1984 MAR p. 1802, Eff. 12/14/84; AMD, 1988 MAR p. 1191, Eff. 6/10/88; AMD, 1994 MAR p. 2136, Eff. 8/12/94; AMD, 1995 MAR p. 1798, Eff. 9/15/95; AMD, 1996 MAR p. 555, Eff. 2/23/96; TRANS, from DHES, and AMD, 1996 MAR p. 1499, Eff. 6/7/96; AMD, 1999 MAR p. 94, Eff. 1/15/99; AMD, 1999 MAR p. 2257, Eff. 10/8/99; AMD, 1999 MAR p. 2275, Eff. 10/8/99.)

17.30.628 I CLASSIFICATION STANDARDS (1) The goal of the state of Montana is to have these waters fully support the following uses: drinking, culinary, and food processing purposes after conventional treatment; bathing, swimming, and recreation; growth and propagation of fishes and associated aquatic life, waterfowl, and furbearers; and agricultural and industrial water supply. An analysis will be performed for each of these waters during each triennial standards review period to

determine the factors preventing or limiting attainment of the designated uses listed herein. Based on these analyses, the specific standards listed below will be adjusted to reflect any improvements which have occurred in water quality as a result of water quality control of nonpoint-source pollution.

(2) No person may violate the following specific water quality standards for waters classified I:

(a) During periods when the daily maximum water temperature is greater than 60 F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, nor are 10% of the total samples during any 30-day period to exceed 400 fecal coliforms per 100 milliliters.

(b) Dissolved oxygen concentration must not be reduced below 3.0 milligrams per liter.

(c) Hydrogen ion concentration must be maintained within the range of 6.5 to 9.5.

(d) No increase in naturally occurring turbidity is allowed which will or is likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

(e) No increase in naturally occurring temperature is allowed which will or is likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

(f) No increases above naturally occurring concentrations of sediment and settleable solids, oils, or floating solids are allowed which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

(g) No increase in naturally occurring true color is allowed which will or is likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

(h)(i) No discharges of toxic, carcinogenic, or harmful parameters may commence or continue which lower or are likely to lower the overall water quality of these waters.

(ii) As the quality of these waters improves due to control of nonpoint sources, point-source dischargers will be required to improve the quality of their discharges following the MPDES rules (ARM Title 17, chapter 30, subchapter 12).

(iii) Beneficial uses are considered supported when the concentrations of toxic, carcinogenic, or harmful parameters in

these waters do not exceed the applicable standards specified in department Circular WQB-7 when stream flows equal or exceed the flows specified in ARM 17.30.635(4) or, alternatively, for aquatic life when site-specific criteria are developed using the procedures given in the Water Quality Standards Handbook (US EPA, Dec. 1983), and provided that other routes of exposure to toxic parameters by aquatic life are addressed. The limits so developed shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards in department Circular WQB-7.

(iv) Limits for toxic, carcinogenic, or harmful parameters in new discharge permits issued pursuant to the MPDES rules (ARM Title 17, chapter 30, subchapter 12) are the larger of either the applicable standards specified in department Circular WQB-7, site-specific standards, or one-half of the mean in-stream concentrations immediately upstream of the discharge point.

(3) The board hereby adopts and incorporates by reference the following:

(a) department Circular WQB-7, entitled "Montana Numeric Water Quality Standards" (September 1999 edition), which establishes standards for toxic, carcinogenic, bioconcentrating, nutrient, and harmful parameters in water; and

(b) the Water Quality Standards Handbook (US EPA, Dec. 1983).

(c) Copies of this material may be obtained from the Department of Environmental Quality, PO Box 200901, Helena, MT 59620-0901. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1982 MAR p. 1746, Eff. 10/1/82; AMD, 1988 MAR p. 1191, Eff. 6/10/88; AMD, 1994 MAR p. 2136, Eff. 8/12/94; AMD, 1995 MAR p. 1798, Eff. 9/15/95; AMD, 1996 MAR p. 555, Eff. 2/23/96; TRANS, from DHES, and AMD, 1996 MAR p. 1499, Eff. 6/7/96; AMD, 1999 MAR p. 94, Eff. 1/15/99; AMD, 1999 MAR p. 2257, Eff. 10/8/99; AMD, 1999 MAR p. 2275, Eff. 10/8/99.)

17.30.629 C-3 CLASSIFICATION STANDARDS (1) Waters classified C-3 are suitable for bathing, swimming and recreation, growth and propagation of non-salmonid fishes and associated aquatic life, waterfowl and furbearers. The quality of these waters is naturally marginal for drinking, culinary and food processing purposes, agriculture and industrial water supply. Degradation which will impact established beneficial uses will not be allowed.

(2) No person may violate the following specific water quality standards for waters classified C-3:

(a) During periods when the daily maximum water

temperature is greater than 60 F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, nor are 10% of the total samples during any 30-day period to exceed 400 fecal coliforms per 100 milliliters.

(b) Dissolved oxygen concentration must not be reduced below the applicable standards specified in department Circular WQB-7.

(c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 9.0 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.

(d) The maximum allowable increase above naturally occurring turbidity is 10 nephelometric turbidity units, except as permitted in ARM 17.30.637.

(e) A 3°F maximum increase above naturally occurring water temperature is allowed within the range of 32°F to 77°F; within the range of 77°F to 79.5°F, no thermal discharge is allowed which will cause the water temperature to exceed 80°F; and where the naturally occurring water temperature is 79.5°F or greater, the maximum allowable increase in water temperature is 0.5°F. A 2°F per-hour maximum decrease below naturally occurring water temperature is allowed when the water temperature is above 55°F, and a 2°F maximum decrease below naturally occurring water temperature is allowed within the range of 55°F to 32°F.

(f) No increases are allowed above naturally occurring concentrations of sediment, settleable solids, oils or floating solids, which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

(g) True color must not be increased more than 5 units above naturally occurring color.

(h)(i) Concentrations of carcinogenic, bioconcentrating, toxic, or harmful parameters which would remain in the water after conventional water treatment may not exceed the applicable standards set forth in department Circular WQB-7.

(ii) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 12, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in department Circular WQB-7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).

(iii) If site-specific criteria are developed using the

procedures given in the Water Quality Standards Handbook (US EPA, Dec. 1983), and provided that other routes of exposure to toxic parameters by aquatic life are addressed, the criteria so developed shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards specified in department Circular WQB-7.

(iv) In accordance with 75-5-306(1), MCA, it is not necessary that wastes be treated to a purer condition than the natural condition of the receiving water as long as the minimum treatment requirements, adopted pursuant to 75-5-305, MCA, are met.

(3) The board hereby adopts and incorporates by reference the following:

(a) department Circular WQB-7, entitled "Montana Numeric Water Quality Standards" (September 1999 edition), which establishes standards for toxic, carcinogenic, bioconcentrating, nutrient, and harmful parameters in water; and

(b) the Water Quality Standards Handbook (US EPA, Dec. 1983) which sets forth procedures for development of site-specific criteria.

(c) Copies of these materials may be obtained from the Department of Environmental Quality, PO Box 200901, Helena, MT 59620-0901. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1982 MAR p. 1746, Eff. 10/1/82; AMD, 1984 MAR p. 1802, Eff. 12/14/84; AMD, 1988 MAR p. 1191, Eff. 6/10/88; AMD, 1994 MAR p. 2136, Eff. 8/12/94; AMD, 1995 MAR p. 1798, Eff. 9/15/95; AMD, 1996 MAR p. 555, Eff. 2/23/96; TRANS, from DHES, and AMD, 1996 MAR p. 1499, Eff. 6/7/96; AMD, 1999 MAR p. 94, Eff. 1/15/99; AMD, 1999 MAR p. 2257, Eff. 10/8/99; AMD, 1999 MAR p. 2275, Eff. 10/8/99.)

#### 17.30.630 TEMPORARY WATER QUALITY STANDARDS

(1) Following are the temporary water quality standards and related provisions for new world mining district:

(a) The goal of the state of Montana is to have these waters support the uses listed for waters classified B-1 at ARM 17.30.623(1). The standards for the parameters listed in this rule temporarily modify the specific standards for those parameters provided in ARM 17.30.623 for each of the water bodies listed below, until the temporary standards expire or are terminated by the board. The standards for parameters not listed in this rule are the specific standards listed in ARM 17.30.623. The existing uses of the water bodies listed below must be maintained during the period that these temporary standards are in effect. No increase from existing conditions for any of the parameters that have been temporarily modified

(no decrease for pH) is allowed at any point in the affected stream segments. The numerical standards for specific parameters listed below apply only at the downstream end of the stream segment. The requirements of ARM 17.30.623 apply to the waters listed in this rule except where those requirements conflict with the temporary standards listed below.

(b) The temporary standards for these stream segments are effective June 4, 1999.

(c) Temporary water quality standards for Daisy Creek, from its headwaters to its confluence with the Stillwater River in the Yellowstone River Drainage, are as follows. No increase from existing conditions (no decrease for pH) is allowed at any point in Daisy Creek for any of the following parameters. These standards are in effect until June 4, 2014. Metals standards are in terms of micrograms per liter ( $\mu\text{g/liter}$ ) total recoverable concentrations and pH standards are in standard units (su).

<u>Parameter</u>	<u>In Daisy Creek at its confluence with the Stillwater River, the following standards shall not be exceeded more than 3% of the time.</u>
	<u><math>\mu\text{g/liter}</math></u>
Aluminum	9,510.
Cadmium	4.
Copper	3,530.
Iron	6,830.
Manganese	1,710.
Zinc	540.
pH	must be maintained above 4.6 su.

(d) Temporary water quality standards for a headwater portion of the Stillwater River, a tributary of the Yellowstone River, from Daisy Creek to the Absaroka-Beartooth wilderness boundary, are as follows. No increase from existing conditions (no decrease for pH) is allowed at any point in this reach of the Stillwater River for any of the following parameters. These standards are in effect until June 4, 2014. Metals standards are in terms of micrograms per liter ( $\mu\text{g/liter}$ ) total recoverable concentrations and pH standards are in standard units (su).

<u>Parameter</u>	<u>In the Stillwater River at the Absaroka-Beartooth wilderness boundary, the following standards shall not be exceeded more than 3% of the time.</u>
	<u><math>\mu\text{g/liter}</math></u>
Aluminum	670.

Copper	200.
Iron	1,320.
Lead	13.
Manganese	86.
Zinc	49.
pH	must be maintained above 5.5 su.

(e) Temporary water quality standards for Fisher Creek, from its headwaters to its confluence with Lady of the Lake Creek, the headwaters of the Clark's Fork of the Yellowstone River, are as follows. No increase from existing conditions (no decrease for pH) is allowed at any point in Fisher Creek for any of the following parameters. These standards are in effect until June 4, 2014. Metals standards are in terms of micrograms per liter ( $\mu\text{g}/\text{liter}$ ) total recoverable concentrations and pH standards are in standard units (su).

<u>Parameter</u>	<u>In Fisher Creek at its confluence with the Lady of the Lake Creek, the following standards shall not be exceeded more than 3% of the time.</u>
	<u><math>\mu\text{g}/\text{liter}</math></u>
Aluminum	470.
Copper	110.
Iron	750.
Lead	2.
Manganese	82.
Zinc	44.
pH	must be maintained above 5.7 su.

(2) Following are the temporary water quality standards and related provisions for portions of Mike Horse Creek, Beartrap Creek and the upper Blackfoot River:

(a) The goal of the state of Montana is to have these waters support the uses designated for waters classified B-1 at ARM 17.30.623(1). The standards for the parameters listed in this rule temporarily modify the specific standards for those parameters provided in ARM 17.30.623 for each of the water bodies listed below, until the temporary standards expire or are terminated by the board. The standards for parameters not listed in this rule are the specific standards listed in ARM 17.30.623 except where those requirements conflict with the temporary standards listed below.

(b) The existing uses of these water bodies must be maintained during the period that these temporary standards are in effect.

(c)(i) Except as provided in (2)(c)(ii), these standards

are effective until May 31, 2008.

(ii) On or before September 1, 2003, the department shall certify to the board the date upon which the United States granted authority to the petitioner, asarco, inc., to conduct water restoration activities on the federal land that is subject to the implementation plan. If the date certified is later than May 31, 2001, the effective period established in (2)(c)(i) will be automatically extended by the number of days that elapsed between May 31, 2001, and the date certified. However, this extension may not exceed an additional two years beyond May 31, 2008.

(d)(i) Except as provided in (2)(d)(ii) below, the temporary water quality standards for Mike Horse Creek, from the clean water diversion structure (N47°1'19.3", W112°21'40.9") to its confluence with Beartrap Creek (N47°1'44.0", W112°21'13.0"), are as follows. For the reach described above, no increase from existing conditions for any of the parameters listed below (no decrease for pH) is allowed. The numeric temporary standards for the specific parameters listed below apply only at the monitoring site location BRSW-22 used to calculate those temporary standards. No more than 3% of the monitored samples may exceed the numeric metals standards or may be less than the pH standard below. Metals standards are in terms of micrograms per liter ( $\mu\text{g}/\text{liter}$ ) total recoverable concentrations and the pH standard is in standard units (su).

Parameter	$\mu\text{g}/\text{liter}$
Cadmium	135.
Copper	3,000.
Iron	900.
Lead	230.
Manganese	6,000.
Zinc	22,000.
pH	must be maintained above 6.5 su.

(ii) The water quality standards for Mike Horse Creek, from the clean water diversion structure (N47°1'19.3", W112°21'40.9") to its confluence with Beartrap Creek (N47°1'44.0", W112°21'13.0"), during remediation-related construction activities are the quality that results from those activities, provided all necessary permits and authorizations are obtained and all reasonable steps are taken to minimize the duration, extent and magnitude of the short-term impacts.

(e)(i) Except as provided in (2)(e)(ii) below, the water quality standards for Beartrap Creek, from the foot of the Beartrap tailings impoundment dam (N47°1'42.1", W112°21'11.3") to



its confluence with Anaconda Creek (N47°2'5.8", W112°21'31.1"), are as follows. For the reach described above, no increase from existing conditions for any of the parameters listed below (no decrease for pH) is allowed. The numeric temporary standards for the specific parameters listed below apply only at the monitoring site location BRSW-23 used to calculate those temporary standards. No more than 3% of the monitored samples may exceed the numeric metals standards or may be less than the pH standard below. Metals standards are in terms of micrograms per liter ( $\mu\text{g}/\text{liter}$ ) total recoverable concentrations and the pH standard is in standard units (su).

<u>Parameter</u>	<u><math>\mu\text{g}/\text{liter}</math></u>
Cadmium	50.
Copper	700.
Iron	500.
Lead	80.
Manganese	3,700.
Zinc	7,500.
pH	must be maintained above 6.5 su.

(ii) The water quality standards for Beartrap Creek, from the foot of the Beartrap tailings impoundment dam (N47°1'42.1", W112°21'11.3") to its confluence with Anaconda Creek (N47°2'5.8", W112°21'31.1"), during remediation-related construction activities are the quality that results from those activities, provided all necessary permits and authorizations are obtained and all reasonable steps are taken to minimize the duration, extent and magnitude of the short-term impacts.

(f)(i) Except as provided in (2)(f)(ii) below, the water quality standards for the Blackfoot River, from Anaconda Creek (N47°2'5.8", W112°21'31.1") to the confluence of Stevens Gulch (N47°2'24.8", W112°22'15.8"), are as follows. For the reach described above, no increase from existing conditions for any of the parameters listed below (no decrease for pH) is allowed. The numeric temporary standards for the specific parameters listed below apply only at the monitoring site location BRSW-9 used to calculate those temporary standards. No more than 3% of the monitored samples may exceed the numeric metals standards or may be less than the pH standard below. Metals standards are in terms of micrograms per liter ( $\mu\text{g}/\text{liter}$ ) total recoverable concentrations and the pH standard is in standard units (su).

<u>Parameter</u>	<u><math>\mu\text{g}/\text{liter}</math></u>
Cadmium	16.
Copper	220.
Lead	25.
Manganese	4,300.
Zinc	6,000.
pH	must be maintained above 6.5 su.

(ii) The water quality standards for the Blackfoot River, from Anaconda Creek (N47°2'5.8", W112°21'31.1") to its confluence with Stevens Gulch (N47°2'24.8", W112°22'15.8"), during remediation-related construction activities are the quality that results from those activities, provided all necessary permits and authorizations are obtained and all reasonable steps are taken to minimize the duration, extent and magnitude of the short-term impacts.

(g)(i) Except as provided in (2)(g)(ii) below, the water quality standards for the Blackfoot River, from the confluence of Stevens Gulch (N47°2'24.8", W112°22'15.8") to the confluence with Pass Creek (N47°2'30.5", W112°22'52.8"), are as follows. For the reach described above, no increase from existing conditions for any of the parameters listed below (no decrease for pH) is allowed. The numeric temporary standards for the specific parameters listed below apply only at the monitoring site location BRSW-12 used to calculate those temporary standards. No more than 3% of the monitored samples may exceed the numeric metals standards or may be less than the pH standards below. Metals standards are in terms of micrograms per liter ( $\mu\text{g/liter}$ ) total recoverable concentrations and the pH standard is in standard units (su).

Parameter	$\mu\text{g/liter}$
Cadmium	10.
Copper	70.
Iron	340.
Lead	23.
Manganese	900.
Zinc	2,700.
pH	must be maintained above 6.5 su.

(ii) The water quality standards for the Blackfoot River, from the confluence of Stevens Gulch (N47°2'24.8", W112°22'15.8") to the confluence with Pass Creek (N47°2'30.5", W112°22'52.8"), during remediation-related construction activities are the quality that results from those activities, provided all necessary permits and authorizations are obtained and all reasonable steps are taken to minimize the duration, extent and magnitude of the short-term impacts. (History: 75-5-201, 75-5-312, MCA; IMP, 75-5-312, MCA; NEW, 1999 MAR p. 1218, Eff. 6/4/99; AMD, 2000 MAR p. 1317, Eff. 5/26/00.)

Rules 17.30.631 through 17.30.634 reserved

17.30.635 GENERAL TREATMENT STANDARDS (1) The degree of

waste treatment required to restore and maintain the quality of surface waters to the standards shall be based on the surface water quality standards and the following:

- (a) the state's policy of nondegradation of existing high water quality as described in 75-5-303, MCA;
  - (b) present and anticipated beneficial uses of the receiving water;
  - (c) the quality and nature of the flow of the receiving water;
  - (d) the quantity and quality of the sewage, industrial waste or other waste to be treated; and
  - (e) the presence or absence of other sources of pollution on the same watershed.
- (f) during periods when the maximum daily water temperature is less than 60°F, the instream fecal coliform concentrations shall be limited by the department only when necessary to protect human health.

(2) Sewage must receive a minimum of secondary treatment as defined by EPA in accordance with requirements set forth in the Federal Water Pollution Control Act, 33 USC, et seq., (Supp. 1973) as amended, and 40 CFR Part 133 and subsequent amendments. Copies of 40 CFR Part 133 and subsequent amendments may be obtained from the department.

(3) Industrial waste must receive, as a minimum, treatment equivalent to the best practicable control technology currently available (BPCTCA) as defined in 40 CFR Subchapter N and subsequent amendments. Copies of 40 CFR Subchapter N and subsequent amendments may be obtained from the department. In cases where BPCTCA is not defined by EPA, industrial waste must receive a minimum of secondary treatment or equivalent as determined by the department.

(4) For design of disposal systems, stream flow dilution requirements must be based on the minimum consecutive 7-day average flow which may be expected to occur on the average of once in 10 years. When dilution flows are less than the above design flow at a point discharge, the discharge is to be governed by the permit conditions developed for the discharge through the waste discharge permit program. If the flow records on an affected surface water are insufficient to calculate a 10-year 7-day low flow, the department shall determine an acceptable stream flow for disposal system design. The department shall determine the acceptable stream flow for disposal system design for controlling nitrogen and phosphorus concentrations.

(5) Where the department has determined that the disposal of sewage may adversely affect the quality of a lake or other state waters, the department may require additional information and data concerning such possible effects. Upon review of such information the department may impose specific requirements for sewage treatment and disposal as are necessary and appropriate to assure compliance with the Water Quality Act, Title 75, chapter 5, MCA. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1982 MAR p. 1746, Eff. 10/1/82; AMD, 1984 MAR p. 1802, Eff. 12/14/84; TRANS, from DHES, and AMD, 1996 MAR p. 1499, Eff. 6/7/96.)

17.30.636 GENERAL OPERATION STANDARDS (1) Owners and operators of water impoundments that cause conditions harmful to prescribed beneficial uses of state water shall demonstrate to the satisfaction of the department that continued operations will be done in the best practicable manner to minimize harmful effects. New water impoundments must be designed to provide temperature variations in discharging water that maintain or enhance the existing propagating fishery and associated aquatic life. As a guide, the following temperature variations are recommended: continuously less than 40°F during the months of January and February, and continuously greater than 44°F during the months of June through September. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; TRANS, from DHES, and AMD, 1996 MAR p. 1499, Eff. 6/7/96; EMERG, AMD, 1997 MAR p. 1588, Eff. 9/9/97.)

17.30.637 GENERAL PROHIBITIONS (1) State surface waters must be free from substances attributable to municipal, industrial, agricultural practices or other discharges that will:

(a) settle to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines;

(b) create floating debris, scum, a visible oil film (or be present in concentrations at or in excess of 10 milligrams per liter) or globules of grease or other floating materials;

(c) produce odors, colors or other conditions as to which create a nuisance or render undesirable tastes to fish flesh or make fish inedible;

(d) create concentrations or combinations of materials which are toxic or harmful to human, animal, plant or aquatic

life; and

(e) create conditions which produce undesirable aquatic life.

(2) No wastes may be discharged and no activities conducted such that the wastes or activities, either alone or in combination with other wastes or activities, will violate, or can reasonably be expected to violate, any of the standards.

(3) Leaching pads, tailing ponds, or water, waste, or product holding facilities must be located, constructed, operated and maintained in such a manner and of such materials so as to prevent the discharge, seepage, drainage, infiltration, or flow which may result in the pollution of surface waters. The department may require that a monitoring system be installed and operated if the department determines that pollutants are likely to reach surface waters or present a substantial risk to public health.

(a) Complete plans and specifications for proposed leaching pads, tailing ponds, or water, waste, or product holding facilities utilized in the processing of ore must be submitted to the department no less than 180 days prior to the day on which it is desired to commence their operation.

(b) Leaching pads, tailing ponds, or water, waste, or product holding facilities operating as of the effective date of this rule must be operated and maintained in such a manner so as to prevent the discharge, seepage, drainage, infiltration or flow which may result in the pollution of surface waters.

(4) Dumping of snow from municipal and/or parking lot snow removal activities directly into surface waters or placing snow in a location where it is likely to cause pollution of surface waters is prohibited unless authorized in writing by the department.

(5) Until such time as minimum stream flows are established for dewatered streams, the minimum treatment requirements for discharges to dewatered receiving streams must be no less than the minimum treatment requirements set forth in ARM 17.30.635(2) and (3).

(6) Treatment requirements for discharges to ephemeral streams must be no less than the minimum treatment requirements set forth in ARM 17.30.635(2) and (3). Ephemeral streams are subject to ARM 17.30.635 through 17.30.637, 17.30.640, 17.30.641, 17.30.645 and 17.30.646 but not to the specific water quality standards of ARM 17.30.620 through 17.30.629.

(7) Pollution resulting from storm drainage, storm sewer discharges, and non-point sources, including irrigation practices, road building, construction, logging practices, over-grazing and other practices must be eliminated or minimized as ordered by the department.

(8) Application of pesticides in or adjacent to state surface waters must be in compliance with the labeled direction, and in accordance with provisions of the Montana Pesticides Act (Title 80, chapter 8, MCA) and the Federal Environmental Pesticides Control Act (7 USC 136, et seq., (Supp. 1973) as amended). Excess pesticides and pesticide containers must not be disposed of in a manner or in a location where they are likely to pollute surface waters.

(9) No pollutants may be discharged and no activities may be conducted which, either alone or in combination with other wastes or activities, result in the total dissolved gas pressure relative to the water surface exceeding 110% of saturation. (History: 75-5-201, 75-5-301, 75-6-112, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1988 MAR p. 1191, Eff. 6/10/88; TRANS, from DHES, and AMD, 1996 MAR p. 1499, Eff. 6/7/96; AMD, 1999 MAR p. 2256, Eff. 10/8/99.)

Rules 17.30.638 and 17.30.639 reserved

17.30.640 MIXING ZONE IS REPEALED (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1992 MAR p. 2064, Eff. 9/11/92; TRANS, from DHES, 1996 MAR p. 1499; REP, 1996 MAR p. 1854, Eff. 7/4/96.)

17.30.641 SAMPLING METHODS (1) Methods of sample collection, preservation and analysis used to determine compliance with the standards must be in accordance with the latest edition of Standard Methods for the Examination of Water and Wastewater published by the American public health association or in accordance with tests or procedures that have been found to be equally or more applicable by EPA as set forth in 40 CFR 136 and subsequent amendments. Copies of 40 CFR 136 and subsequent amendments may be obtained at the department. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; TRANS, from DHES, 1996 MAR p. 1499.)

Rules 17.30.642 through 17.30.644 reserved

17.30.645 RADIOLOGICAL CRITERIA (1) No person may cause radioactive materials in surface waters to exceed the standards specified in department Circular WQB-7.

(2) The board hereby adopts and incorporates by reference department Circular WQB-7, entitled "Montana Numeric Water

Quality Standards" (December, 1995 edition), which establishes limits for toxic, carcinogenic, bioconcentrating, and harmful parameters in water. Copies of the circular may be obtained from the Department of Environmental Quality, PO Box 200901, Helena, MT 59620-0901. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1988 MAR p. 1191, Eff. 6/10/88; AMD, 1994 MAR p. 2136, Eff. 8/12/94; AMD, 1995 MAR p. 1798, Eff. 9/15/95; AMD, 1996 MAR p. 555, Eff. 2/23/96; TRANS, from DHES, 1996 MAR p. 1499.)

17.30.646 BIOASSAYS (1) Bioassay tolerance concentrations must be determined using the latest available research results for the materials, by bioassay tests procedures for simulating actual stream conditions as set forth in the latest edition of Standard Methods for the Examination of Water and Wastewater published by the American public health association, ASTM Standards Part 31, or in accordance with tests or analytical procedures that are found to be equal or more applicable by EPA. Any bioassay studies made must be made using a representative sensitive local species and life stages of economic or ecological importance; provided other species whose relative sensitivity is known may be used when there is difficulty in providing the more sensitive species in sufficient numbers or when such species are unsatisfactory for routine confined bioassays. All bioassay methods and species selections must be approved by the department. (History: 75-5-201, 75-5-301, MCA; IMP, 75-5-301, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73; AMD, Eff. 9/5/74; AMD, 1980 MAR p. 2252, Eff. 8/1/80; AMD, 1988 MAR p. 1191, Eff. 6/10/88; TRANS, from DHES, 1996 MAR p. 1499.)